

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	2	"6116723".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/24 08:39
S1	0	("5870126514624356003855956054 60861936231173627678862869446 28694564945686273562405390244 19676455173447002024967207552 37805541631604805561025356264 31462869216293662644356755820 6865853626648460666542").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/17 13:01
S2	0	"5870126" "5146243" "5600385" "5956054" "6086193" "6231173" "6276788" "6286944" "6286945" "6494568" "6273562" "4053902" "4419676" "4551734" "4700202" "4967207552378055416316048055 61025356264314628692162936626 44356755820686585362664846066 66542"	USPAT	AND	OFF	2005/10/17 13:02
S3	264	"5870126" "5146243" "5600385" "5956054" "6086193" "6231173" "6276788" "6286944" "6286945" "6494568" "6273562" "4053902" "4419676" "4551734" "4700202" "4967207 5523780 5541631 6048055 6102535 6264314 6286921 6293662 6443567 5582068 6585362 6648460 6666542"	USPAT	OR	OFF	2005/10/17 13:04
S4	418	"5870126" "5146243" "5600385" "5956054" "6086193" "6231173" "6276788" "6286944" "6286945" "6494568" "6273562" "4053902" "4419676" "4551734" "4700202" "4967207" "5523780" "5541631" "6048055" "6102535" "6264314" "6286921" "6293662" "6443567" "5582068" "6585362" "6648460" "6666542"	USPAT	OR	OFF	2006/03/13 12:54
S5	70	(347/85.ccls. or 347/86.ccls.) and (off\$axis) same (reservoir or cavity or chamber or printhead or print) and (interface same (air or fluid or ink or gas or liquid))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/17 15:06
S6	0	("2004/0183870").URPN.	USPAT	AND	OFF	2005/10/17 15:01

## EAST Search History

S7	35	(347/85.ccls. or 347/86.ccls.) and (off\$axis) same (reservoir or cavity or chamber or printhead or print) and (pressure same (regulate or regulation or change)) and (control same printing)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/17 15:13
S8	60	(347/85.ccls. or 347/86.ccls.) and (off\$axis) same (reservoir or cavity or chamber or printhead or print) and (pressure same (regulate or regulation or change or control)) and (control same printing)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 08:23
S9	53	(347/85.ccls. or 347/86.ccls.) and (off\$axis) same (reservoir or cavity or chamber or printhead or print) and (pressure same control) and (control same printing)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/17 15:21
S10	69	(347/85.ccls. or 347/86.ccls.) and (off\$axis) same (reservoir or cavity or chamber or printhead or print) and (pressure same (controller or control)) and ((control or controller) same printing)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 07:56
S11	72	(347/85.ccls. or 347/86.ccls.) and (off\$axis or off adj axis) same (reservoir or cavity or chamber or printhead or print) and (pressure same (controller or control)) and ((control or controller) same printing)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 08:01
S12	74	(347/85.ccls. or 347/86.ccls.) and (off\$axis or off adj axis) same (reservoir or cavity or chamber or printhead or print) and (pressure same (interface or surface or contact)) and ((interface or surface or contact) same printing)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 08:02
S13	126	(347/85.ccls. or 347/86.ccls.) and (off\$axis or off adj axis) same (reservoir or cavity or chamber or printhead or print) and nozzles	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 08:02
S14	0	(347/85.ccls. or 347/86.ccls.) and (off\$axis or off adj axis) same (reservoir or cavity or chamber or printhead or print) and (nozzles same (presure near (regulation or regulator or regulate or regulating))))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 08:03

## EAST Search History

S15	0	(347/85.ccls. or 347/86.ccls.) and (off\$axis or off adj axis) same (reservoir or cavity or chamber or printhead or print) and ((nozzles or nozzle) same (presure near (regulation or regulator or regulate or regulating)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 08:03
S16	10	(347/85.ccls. or 347/86.ccls.) and (off\$axis or off adj axis) same (reservoir or cavity or chamber or printhead or print) and ((air near interface))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 08:14
S17	2	"20040021751"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 09:10
S18	11	(347/85.ccls. or 347/86.ccls.) and (off\$axis or off adj axis) same (reservoir or cavity or chamber or printhead or print) and ((air near interface or vent near chamber))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 08:17
S19	11	(347/85.ccls. or 347/86.ccls.) and (off\$axis or off adj axis or broad\$axis) same (reservoir or cavity or chamber or printhead or print) and ((air near interface or vent near chamber))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 08:17
S20	6	(347/85.ccls. or 347/86.ccls.) and (off\$axis) same (reservoir or cavity or chamber or printhead or print) and (vent same (nozzle or nozzles))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 08:29
S21	2	347/86.ccls. and lateral adj insertion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 13:37
S22	9	347/86.ccls. and ((lateral near insertion) or (laterally near inserted))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 09:14

## EAST Search History

S23	0	347/86.ccls. and ((lateral or laterally or vertical or vertically) near (insert or inserting or inserted)) same upright	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 09:17
S24	31	347/86.ccls. and ((lateral or laterally or vertical or vertically) near (insert or inserting or inserted))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 09:20
S25	19	347/86.ccls. and reservoir same upright	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 09:20
S26	50	347/86.ccls. and ball and septum	USPAT	OR	OFF	2005/10/18 09:28
S27	10	(347/85.ccls or 347/86.ccls.) and reservoir same upright	USPAT	OR	OFF	2005/10/18 10:26
S28	22	(347/85.ccls or 347/86.ccls.) and air same (ball and septum)	USPAT	OR	OFF	2005/10/18 10:36
S29	49	(347/85.ccls or 347/86.ccls.) and (air near inlet or outlet) same (ball)	USPAT	OR	OFF	2005/10/18 10:37
S30	8	(347/85.ccls or 347/86.ccls.) and (air near (inlet or outlet)) same (ball)	USPAT	OR	OFF	2005/10/18 10:43
S31	11	(347/85.ccls or 347/86.ccls.) and (air near (inlet or outlet)) same (ball)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/18 10:44
S32	16	"2076748" or "02076748" or 276748	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/18 10:44
S33	39	"2076748" or "02076748" or "276748"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/18 10:44
S34	68	347/86.ccls. and pressure same (positive and negative and ambient)	USPAT	OR	OFF	2005/10/18 11:18

## EAST Search History

S35	37	347/86.ccls. and pressure near (positive and negative and ambient)	USPAT	OR	OFF	2005/10/18 11:18
S36	37	347/86.ccls. and pressure near positive and pressure near negative and pressure near ambient	USPAT	OR	OFF	2005/10/18 11:18
S37	42	347/86.ccls. and pressure near positive and pressure near negative and pressure near ambient	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/18 11:21
S38	1	347/19.ccls. and pressure near positive and pressure near negative and pressure near ambient	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/18 11:21
S39	390	"347"/\$3.ccls. and air same ball	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 13:41
S40	0	"347"/\$3.ccls. and air near ball	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 13:39
S41	390	"347"/\$3.ccls. and ball same (air or froth and (ink or liquid))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 13:45
S42	303	"347"/\$3.ccls. and ball same ((air or froth) and (ink or liquid))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 13:48
S43	390	"347"/\$3.ccls. and ball same ((air or froth))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 13:52

## EAST Search History

S44	363	"347"/\$3.ccls. and ball same ((air or froth)) not silverbrook	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 13:54
S45	109	"347"/\$3.ccls. and ball same (spring or septum) same ((air or froth)) not silverbrook	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:07
S46	615	"347"/\$3.ccls. and ambient near pressure	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:11
S47	9	"347"/\$3.ccls. and (fluid near connector) same air near interface	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:13
S48	11	"347"/\$3.ccls. and (fluid near connector) same air	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:14
S49	2074	"347"/\$3.ccls. and (fluid near ink)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:17
S50	119	"347"/\$3.ccls. and (fluid near ink near (conduit or connector or communication or tube or channel or channell))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:19
S51	3	"347"/\$3.ccls. and (air near (input and output))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:21

## EAST Search History

S52	707	"347"/\$3.ccls. and (air near (vent))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:23
S53	157	"347"/\$3.ccls. and (air near (vent) same (in and out))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:31
S54	26	"347"/\$3.ccls. and (fluid adj connector)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:43
S55	14	"347"/\$3.ccls. and (fluid near (tube or connector or connecting or passage or tubular) same (air near (interface or connecting or communication)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:54
S56	59	"347"/\$3.ccls. and ((fluid or ink) near (tube or connector or connecting or passage or tubular) same (air near (interface or connecting or communication)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 14:47
S57	2	"20020071013"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 15:01
S58	4163	ink near (air or froth)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 15:02
S59	0	"347"/\$3.cc.s	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 15:02

## EAST Search History

S60	0	"347"/\$3.ccls	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 15:02
S61	63686	"347"/\$3.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 15:02
S62	2285	S61 and S58	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 15:02
S63	79	"347"/\$3.ccls. and (ink near4 (froth or air) near7 (returning or return))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2005/10/18 15:04
S64	3808	347/85 or 347/86	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2006/03/13 14:36
S65	28	("5870126" "5146243" "5600385" "5956054" "6086193" "6231173" "6276788" "6286944" "6286945" "6494568" "6273562" "4053902" "4419676" "4551734" "4700202" "4967207" "5523780" "5541631" "6048055" "6102535" "6264314" "6286921" "6293662" "6443567" "6582068" "6585362" "6648460" "6666542").pn.	USPAT	OR	OFF	2006/03/13 14:56
S66	4	("1201441" "0803364" "0562717" "04187448" "0803364" "03016738" "0803365").pn.	USPAT	OR	OFF	2006/03/13 12:57
S67	3	("1201441" "0803364" "0562717" "04187448" "0803364" "03016738" "0803365").pn.	EPO; JPO	OR	OFF	2006/03/13 13:00
S68	0	10/768412	EPO; JPO	OR	OFF	2006/03/13 13:01



## EAST Search History

S69	1	10/768412	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 13:57
S70	1	10/768412 and (off near axis)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 13:02
S71	1	("6022101").pn.	USPAT	OR	OFF	2006/03/13 13:21
S72	0	("6022101").pn. and (air and liquid)	USPAT	OR	OFF	2006/03/13 13:21
S73	1	("6022101").pn. and (air and ink)	USPAT	OR	OFF	2006/03/13 13:22
S74	1	("6022101").pn. and (air same ink)	USPAT	OR	OFF	2006/03/13 13:55
S75	3	("5870126" "5146243" "5600385" "5956054" "6086193" "6231173" "6276788" "6286944" "6286945" "6494568" "6273562" "4053902" "4419676" "4551734" "4700202" "4967207" "5523780" "5541631" "6048055" "6102535" "6264314" "6286921" "6293662" "6443567" "6582068" "6585362" "6648460" "6666542").pn. and (air near out) and ((liquid or ink) near (in or into))	USPAT	OR	OFF	2006/03/13 13:35
S76	0	S64 and (air near out) same ((liquid or ink) near (in or into)) same (reservoir or cavity)	USPAT	OR	OFF	2006/03/13 13:36
S77	0	S64 and (air near out) same ((liquid or ink) near (in or into)) same (reservoir or cavity or chamber or recess)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 13:36
S78	162	S64 and (air with out) same ((liquid or ink) with (in or into)) same (reservoir or cavity or chamber or recess)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 13:36
S79	0	("6022101" "5675367").pn. and (ball same septum)	USPAT	OR	OFF	2006/03/13 13:58
S80	1	("6022101" "5675367").pn. and (ball)	USPAT	OR	OFF	2006/03/13 14:08
S81	26	ball with septum same (air and fluid) with (interface or inlet or outlet or into or out)	USPAT	OR	ON	2006/03/13 14:01

## EAST Search History

S82	5132	ball with septum same (air and fluid) with (interface or inlet or outlet or into or out) and S64	USPAT	OR	ON	2006/03/13 14:01
S83	976	ball with septum same (air and fluid) with (interface or inlet or outlet or into or out) and1	USPAT	OR	ON	2006/03/13 14:01
S84	25	ball with septum same (air and fluid) with (interface or inlet or outlet or into or out) and S64	USPAT	OR	ON	2006/03/13 14:01
S85	2	("6022101" "5675367").pn.	USPAT	OR	OFF	2006/03/13 14:16
S86	2	("6022101" "5675367").pn. and pressure	USPAT	OR	OFF	2006/03/13 14:44
S87	17	S64 and ball with septum same (air and ink) with (interface or port)	USPAT	OR	ON	2006/03/13 14:22
S88	0	S64 with (air and liquid) with (interface or port or supply or hole) with (above or below)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/13 15:38
S89	157	S64 and (air and liquid) with (interface or port or supply or hole) with (above or below)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/13 14:38
S90	2	("6022101" "5675367").pn. and pressure and air	USPAT	OR	OFF	2006/03/13 14:44
S91	2	("6022101" "5675367").pn. and pressure same air	USPAT	OR	OFF	2006/03/13 14:44
S92	745	S64 and (air with (port or interface or hole or inlet or outlet or in or into or out)) with pressure	USPAT	OR	OFF	2006/03/13 14:46
S93	1	S64 and (air with (port or interface or hole or inlet or outlet or in or into or out)) with pressure same (above and below) with ambient	USPAT	OR	OFF	2006/03/13 14:47
S94	167	S64 and (air with (port or interface or hole or inlet or outlet or in or into or out)) with pressure same (ambient or threshold)	USPAT	OR	OFF	2006/03/13 14:47
S95	19	S64 and (air with (port or interface or hole or inlet or outlet or in or into or out)) with pressure same (ambient or threshold) with ((above or higher or high or increase) and (below or decrease or lower))	USPAT	OR	OFF	2006/03/13 14:55

## EAST Search History

S96	56	S64 and (air with (port or interface or hole or inlet or outlet or in or into or out)) with pressure with ((above or higher or high or increase) and (below or decrease or lower))	USPAT	OR	OFF	2006/03/13 14:55
S97	25	("5870126" "5146243" "5600385" "5956054" "6086193" "6231173" "6276788" "6286944" "6286945" "6494568" "6273562" "4053902" "4419676" "4551734" "4700202" "4967207" "5523780" "5541631" "6048055" "6102535" "6264314" "6286921" "6293662" "6443567" "6582068" "6585362" "6648460" "6666542").pn. and pressure	USPAT	OR	OFF	2006/03/13 14:58
S98	18	("5870126" "5146243" "5600385" "5956054" "6086193" "6231173" "6276788" "6286944" "6286945" "6494568" "6273562" "4053902" "4419676" "4551734" "4700202" "4967207" "5523780" "5541631" "6048055" "6102535" "6264314" "6286921" "6293662" "6443567" "6582068" "6585362" "6648460" "6666542").pn. and pressure same air	USPAT	OR	OFF	2006/03/13 15:02
S99	0	S64 and (air near (interface or port)) with regulat\$3 with pressure	USPAT	OR	OFF	2006/03/13 15:03
S100	9	S64 and (air with (interface or port)) with regulat\$3 with pressure	USPAT	OR	OFF	2006/03/13 15:03
S101	11	S64 and (air with (interface or port)) with regulat\$3 with pressure	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 15:04
S102	1624	childers.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 15:04
S103	119	childers.in. and "347"/\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 15:05

## EAST Search History

S10 4	93	childers.in. and "347"/\$3 and (pressure)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 15:07
S10 5	39	childers.in. and "347"/\$3 and (pressure) same air	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 15:33
S10 8	3	"6905198".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 15:34
S10 9	12	"6116723"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/13 15:38
S11 0	0	("5675367" "6022101").pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2006/03/23 14:31
S11 1	4	("5675367" "6022101").pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/24 08:34
S11 2	2	("5721576").pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/23 15:22